

Notice of Allowability	Application No.	Applicant(s)	
	09/689,429	LEE ET AL.	
	Examiner	Art Unit	
	Mitra Kianersi	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/23/2004.
2. ☒ The allowed claim(s) is/are 1-3,5-10 and 12-14.
3. ☒ The drawings filed on 12 October 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>2/17/2005</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Allowable Subject Matter

The rejection has been overcome by the amendment and remarks and that the pending claims 1-3, 5-10 and 12-14 are in condition for allowance.

Claims 4 and 11 have been withdrawn from consideration.

Claims 1-3, 5-10 and 12-14 are allowed.

The following is an examiner's statement of reasons for allowance.

The primary reason for the allow of claims 1-3, 5-10 and 12-14 are:

The above-mentioned claims are patentable because no pertinent prior art could be found which discloses the current limitations of Allowable Subject, the independent claim 1 as amended, and also claim 8, with similar elements recite "delegating to a SmartKey class that implements a java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB". The present invention teaches or suggests a SmartHandle which extends the capabilities of the EJB Handle, such as enabling part comparison of two EJB Handles without instantiating the actual EJB object, thereby advantageously enabling the present invention to order a list of SmartHandles without accessing the remote objects that they refer to (i.e., actual EJB objects), as required in amended independent claims 1 and 8.

Regarding claim 1 and 8, Acker et al. does not teach or suggest "delegating to a SmartKey class that implements a java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be

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compared without instantiating the corresponding Entity EJB," as required in amended claims 1 and 8". Paragraph 38 in Acker et al. merely states that "the scoped CBctxFactory 704 is the intermediate layer that provides the scoping behavior. Since, a delegation model or the scoped initial context factory could implement the javax.naming.spi.InitialContextFactory interface.

Regarding amended claims 1 and 8, performing a field-by-field comparison of attributes associated with said primary key, permits two EJB Handles to be compared without instantiating the corresponding Entity EJB to Acker et al.'s scoped CBctxFactory 704 or a delegation model to implement the javax.naming.spi.InitialContextFactory interface." For this reason, the Acker's name service scoping behavior is not equivalent to performing a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared, without instantiating the corresponding Entity EJB", as called for in, amended claims 1 and 8.

As stated herein, Acker et al. is not suggestive of performing a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB, as required in amended independent claims 1 and 8 and the steps of maintaining an Entity EJB object relationship, storing EJB Home class from which an Entity EJB was generated and from which it can be re-instantiated, and also maintaining an instance of a SmartKey that describes the primary key for a database column which an Entity EJB object is mapped, as required in claim 1 and similarly in claim 8. These are features recited by independent claims 1, 3, 8 and 10.

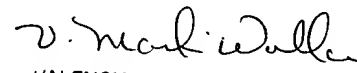
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (571) 272-3915. The examiner can normally be reached on 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mitra Kianersi
Feb/17/2005


VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

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Claims 1-14 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-9, 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Apte et al. (US Patent No. 6,269,373)

1. As per claim 1, Apte et al. teach a method of extending EJB Handles for use with Enterprise JavaBeans (EJBs) to provide a Smart Handle, comprising the steps of: maintaining an Entity EJB object relationship through a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle; (corresponds to creation of entity bean, col 16, lines 40-52), storing EJB Home class from which an Entity EJB was generated and from which said Entity EJB can be re-instantiated (col 16, lines 53-56); and maintaining an instance of a Smart Key that describes said primary key for a database column to which an Entity EJB object is mapped. (corresponds to when the entity bean data is automatically maintained, col 16, lines 57-65, and col 17, lines 21-28)

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2. As per claim 2, Apte et al. teach a method further comprising the steps of instantiating said Entity EJB object associated with said Smart Handle with a single method invocation. (corresponds to stateful session bean, col 16, lines 10-17)

3. As per claim 5, wherein said SmartKey includes said primary key of the EJB Handle, thereby providing portability to said Entity EJB object. (corresponds to portable, downloadable object implementations, and Java interface definitions, among others. col 8, lines 58-67)

4. As per claim 6, further comprising the step of assigning each attribute of said Entity EJB object and said SmartKey to a separate column within a relational database table, thereby permitting said Smart Handle to be mapped to a multi-column relational database table. (corresponds to a container implemented on top of an RDBMS may manage persistence by storing each bean's data as a row in a table. Col 16, lines 57-61, Apte et al.)

5. As per claim 7, wherein said Smart Handle includes at least attributes HomeClassName, KeyClassName, and HomeName. (corresponds to software entities comprising data elements or attributes and methods, which manipulate data elements. Col 6, lines 5-9)

6. As per claim 8, a SmartHandle for extending EJB Handles for use with Enterprise JavaBeans (EJBs), comprising:

- EJB Home class from which an Entity EJB was generated and from which said Entity (EJB) can be re-instantiated; and (corresponds to creation of entity bean, col 16, lines 40-52),

- an instance of a SmartKey that describes said primary key for a database column to which an Entity EJB object is mapped; (col 16, lines 53-56);

- wherein said Smart Handle maintains an Entity EJB object relationship

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through a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle; (corresponds to when the entity bean data is automatically maintained, col 16, lines 57-65, and col 17, lines 21-28)

7. Claims 9 and 12-14 recite the same limitations as claims 2 and 5-7.

Therefore, they are analyzed and rejected by the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apte et al. (US Patent No. 6,269,373) and further in view of Acker et al. (US 2002/0147696).

8. As per claim 3, Apte et al. teach a method wherein said single method invocation includes the steps of using reflection to obtain an `jbFindByPrimaryKey` method; and invoking said `ejbFindByPrimaryKey` method with said `SmartKey`. (corresponds to EJB being invoked by clients, col 7, lines 31-38) and also see (col 6, lines 58-67)

Apte do not explicitly teach locating a EJB Home class using Java Naming and Directory Interface (JNDI); Apte et al. teach an EJB Handle is a Java interface defined in the EJB standard specification where a serialized EJB Handle object contains references to the Handle implementation class. (col 2, lines 17-26).

However, Acker et al. teach a Java Naming and Directory Interface (JNDI) that

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provide directory and naming functionality for Java applications, paragraph [0006]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Apte's idea of EJB Handle as a Java interface with Acker et al. Java naming and Directory Interface (JNDI) for improving object interaction and name service behavior in an object-oriented environment.

9. As per claim 4, further comprising the steps of:

- implementing java.util.Comparable interface; (corresponds to a route of Unit Test on local machines, Functional Test and Integration Test on departmental machines, and Production Test on globally available machines, each set of machines using a different name service scope, it is desirable to allow rebinding of the EJBs in an appropriate scope of the namespace without having to change the EJB deployment data and redeploying. Paragraph [0045], Acker) and

- delegating to a SmartKey class that implements a Java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB Objects. (a delegation model could just as easily be used, or the scoped initial context factory could completely implement the javax.naming.spi.InitialContextFactory interface. Paragraph [0038], Acker)

10. Claims 10-11 recite the same limitations as claims 3-4. Therefore, they are analyzed and rejected by the same rationale.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-9923.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mitra Kianersi
Jan/28/2004


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

IN THE CLAIMS

1. (Currently Amended) A method of extending EJB Handles for use with Enterprise JavaBeans (EJBs) to provide a SmartHandle, comprising the steps of:
 - maintaining an Entity EJB object relationship through a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle;
 - storing EJB Home class from which an Entity EJB was generated and from which said Entity EJB can be re-instantiated; ~~and~~
 - maintaining an instance of a SmartKey that describes said primary key for a database column to which an Entity EJB object is mapped; and
 - delegating to a SmartKey class that implements a java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB.
2. (Original) The method of claim 1, further comprising the steps of instantiating said Entity EJB object associated with said SmartHandle with a single method invocation.
3. (Original) The method of claim 2, wherein said single method invocation includes the steps of:
 - locating said EJB Home class using Java Naming and Directory Interface (JNDI);
 - using reflection to obtain an ejbFindByPrimaryKey method; and
 - invoking said ejbFindByPrimaryKey method with said SmartKey.
4. (Canceled)
5. (Original) The method of claim 1, wherein said SmartKey includes said primary key of the EJB Handle, thereby providing portability to said Entity EJB object.

6. (Original) The method of claim 1, further comprising the step of assigning each attribute of said Entity EJB object and said SmartKey to a separate column within a relational database table, thereby permitting said SmartHandle to be mapped to a multi-column relational database table.
7. (Original) The method of claim 1, wherein said SmartHandle includes at least attributes HomeClassName, KeyClassName, and HomeName.
8. (Currently Amended) A SmartHandle for extending EJB Handles for use with Enterprise JavaBeans (EJBs), comprising:
 - EJB Home class from which an Entity EJB was generated and from which said Entity EJB can be re-instantiated; and
 - an instance of a SmartKey that describes said primary key for a database column to which an Entity EJB object is mapped; and
 - wherein said SmartHandle maintains an Entity EJB object relationship through a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle; and delegates to a SmartKey class that implements a java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB Objects.
9. (Original) The SmartHandle of claim 8, wherein said Entity EJB object associated with said SmartHandle being instantiated with a single method invocation.
10. (Original) The SmartHandle of claim 9, wherein said single method invocation is operable to locate said EJB Home class using Java Naming and Directory Interface (JNDI), use reflection to obtain an ejbFindByPrimaryKey method, and invoke said ejbFindByPrimaryKey method with said SmartKey.
11. (Canceled)

12. (Original) The SmartHandle of claim 8, wherein said SmartKey includes said primary key of the EJB Handle, thereby providing portability to said Entity EJB object.
13. (Original) The SmartHandle of claim 8, wherein each attribute of said Entity EJB object and said SmartKey is assigned to a separate column within a relational database table, thereby permitting said SmartHandle to be mapped to a multi-column relational database table.
14. (Original) The SmartHandle of claim 8, wherein said SmartHandle includes at least attributes HomeClassName, KeyClassName, and HomeName.

REMARKS/ARGUMENTS

In light of the remarks to follow, reconsideration and allowance of this application are requested.

Claims 1-2, 5-9, and 12-14 have been rejected under 35 U.S.C. §102(e) as being anticipated by Apte et al. U.S. Patent No. 6,269,373 (Apte et al.) and the claims 3-4 and 10-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Apte et al. and further in view of U.S. Published Application No. 2002/0147696 (Acker et al.). Claims 4 and 11 have been canceled, thereby obviating the rejection of these claims. Applicants respectfully traverse these rejections with respect to the remaining claims.

Applicants submit that Apte et al. and Acker et al. are not prior art under 35 U.S.C. § 102 and the § 102 and §103 rejections in Paper Nos. 5 and 8 based on Apte et al. and Acker et al. are improper and should be withdrawn. As stated in the Declaration filed on April 19, 2004, applicants respectfully submit that well prior to the February 26, 1999 filing date of the Apte et al. patent (and well prior to the August 12, 1999 filing date of the Acker et al. published application), the present invention was conceived and reduced to practice. Both the Apte et al. patent and Acker et al. published application are therefore inapplicable as § 102 prior art and a reference that does not qualify as prior art under § 102 cannot be basis of a rejection under § 102 and §103. Applicant therefore respectfully request that rejections based on allegedly anticipation by Apte et al. and/or obviousness over the combination of Apte et al. patent and Acker et al. published application be reconsidered and withdrawn.

The Examiner alleges that the evidence submitted with the Declaration is insufficient to establish a conception of the invention of Apte et al. Applicant respectfully directs the Examiner attention to Exhibit B which includes a sample source code for SmartHandle.java, including the java.util.Comparable interface and delegation to a SmartKey for comparing attributes associated with the primary key to permit two EJB Handles to be compared without instantiating the corresponding Entity EJB Objects. Accordingly, Applicants respectfully submits that the evidence submitted with

Declaration filed on April 19, 2004 is sufficient to establish a conception of the invention prior to the effective date of Apte et al.

Moreover, contrary to the Examiner's assertion, Apte et al. independently or in combination with Acker et al. does not teach or suggest the present invention recited in claims 1 and 8. Apte et al. relates to a method for persisting a container-managed server object or bean in a distributed data processing system. Acker et al. relates to a system and method for improving name service behavior in a object-oriented programming environment, i.e., name service scoping behavior. Only the present invention teaches or suggests a SmartHandle which extends the capabilities of the EJB Handle, such as enabling part comparison of two EJB Handles without instantiating the actual EJB object, thereby advantageously enabling the present invention to order a list of SmartHandles without accessing the remote objects that they refer to (i.e., actual EJB objects), as required in amended independent claims 1 and 8.

Contrary to the Examiner's assertion, Acker et al. does not teach or suggest "delegating to a SmartKey class that implements a java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB," as required in amended claims 1 and 8 (originally recited in canceled claims 4 and 11). In fact, paragraph 38 in Acker et al. cited by the Examiner, merely states that "the scoped CBCtxFactory 704 is the intermediate layer that provides the scoping behavior ... A delegation model could be just as easily be used, or the scoped initial context factory could completely implement the javax.naming.spi.InitialContextFactory interface." Applicants respectfully submit that one of ordinary skill in the art would not equate performing a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB to Acker et al.'s scoped CBCtxFactory 704 or a delegation model to implement the javax.naming.spi.InitialContextFactory interface." That is, the Examiner alleges that Acker's name service scoping behavior is equivalent to performing a field-by-field comparison of attributes associated with said primary key, thereby

permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB, as called for in amended claims 1 and 8.

Applicants respectfully request that the Examiner indicate where in Ackers et al. it teaches “delegating to a SmartKey class that implements a java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB,” as required in amended claims 1 and 8 (originally recited in canceled claims 4 and 11).

Additionally, the Examiner incorrectly alleges that Apte et al. teaches the step of “maintaining an instance of a SmartKey that describes said primary key for a database column to which an Entity EJB object is mapped,” as required in claim 1 and similarly in claim 8. In fact, col. 16, lines 57-65 and col. 17, lines 21-28 in Apte et al., cited by the Examiner, merely recite that “a container implemented on top of an RDBMS may manage persistence by storing each bean’s data as a row in a table.” Whereas the present invention teaches that the instance of a SmartKey that describes the primary key to be maintained in a database column to which an Entity EJB object is mapped. This advantageously allows the SmartKeys and the SmartHandles that contain them to be easily compared and stored in ordered lists.

Further, the Examiner incorrectly alleges that Apte et al. teaches the step of “maintaining an Entity EJB object relationship thorough a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle,” as required in claim 1 and similarly in claim 8. In fact, col. 16, lines 40-52 in Apte et al., cited by the Examiner, merely describes that “An entity bean can be created in two ways ...” Applicants are puzzled as to how “creation of an entity bean” is equivalent to “maintaining an Entity EJB object relationship.”

Furthermore, the Examiner incorrectly alleges that the Apte et al. teaches the step of “storing EJB Home class from which an Entity EJB was generated and from which said Entity EJB can be re-instantiated,” as required in claim 1 and similarly in claim 8. In fact, col. 16, lines 53-56 in Apte et al., cited by the Examiner, merely recites that “the bean is entirely responsible for storing and retrieving its instance data.” However,

applicants respectfully submits that one of ordinary skill in the art would not equate the step storing of its instance data by the bean to the step of “storing EJB Home class from which an Entity EJB was generated and from which said EJB can be re-instantiated,” as called for in claim 1 (similarly in claim 8).

Of course, a rejection based on 35 U.S.C. §102(e) requires that the cited reference disclose each and every element covered by the claim. *Electro Medical Systems S.A. v. Cooper Life Sciences Inc.*, 32 USPQ2d 1017, 1019 (Fed. Cir. 1994); *Lewmar Marine Inc. v. Barient Inc.*, 3 USPQ2d 1766, 1767-68 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988); *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), *cert. denied*, 484 U.S. 827 (1987). The Federal Circuit has mandated that 35 U.S.C. §102 requires no less than “complete anticipation ... [a]nticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim.” *Connell v. sears, Roebuck & Co.*, 772 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983); *See also, Electro Medical Systems*, 32 USPQ2d at 1019; *Verdegaal Bros.*, 814 F.2d at 631.

In view of the foregoing differences, it is respectfully submitted that Apte et al. does not anticipate nor render obvious the invention as recited in claims 1 and 8, therefore, claims 1 and 8 are patentably distinct over this prior art. It is requested the rejection of claims 1 and 8 under 35 U.S.C. §102(e) be withdrawn.

Since claims 2, 5-7, 9 and 12-14 depend from claims 1 and 8, respectively, the foregoing discussion of claims 1 and 8 is equally applicable to claims 2, 5-7, 9 and 12-14 and is believed to obviate the rejection of claims 2, 5-7, 9 and 12-14.

In addition, it should be noted that claim 2 (and similarly claim 9) recites the step of “instantiating said Entity EJB object associated with said SmartHandle with a single method invocation.” Apte et al. neither teaches or suggests such instantiating step. In fact, col. 16, lines 10-17 in Apte et al., cited by the Examiner, merely describe “stateless session beans” and is not even remotely related to an Entity Bean.

Claim 5 (and similarly claim 12) defines that “said SmartKey includes said primary key of said EJB Handle, thereby providing portability to said Entity EJB object.”

Apte et al. neither teaches or suggests such SmartKey. In fact, col. 8, lines 58-67 in Apte et al., cited by the Examiner, merely describes that Remote Method Invocation depends on many features of Java-object serialization, portable, downloadable object implementations.

Claim 6 (and similarly claim 13) recites the step of "assigning each attribute of said Entity EJB object and said SmartKey to a separate column within a relational database table, thereby permitting the SmartHandle to be mapped to a multi-column relational database table." Apte et al. neither teaches or suggests such assigning step where each attribute of the Entity EJB object and the SmartKey are assigned to a separate column. In fact, col. 16, lines 57-61 in Apte et al., cited by the Examiner, merely describes that "a container implemented on top of an RDBMS may manage persistence by storing each bean's data as a row in a table."

Claim 7 (and similarly claim 14) defines that SmartHandle includes at least attributes HomeClassName, KeyClassName and HomeName. Apte et al. does not teach or suggest such SmartHandle.

As stated herein, Acker et al. relates to process and system for providing name service scoping behavior. But, Acker et al. is not suggestive of performing a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB, as required in amended independent claims 1 and 8. Also, Acker et al. is not suggestive of the steps of maintaining an Entity EJB object relationship, storing EJB Home class from which an Entity EJB was generated and from which it can be re-instantiated, and maintaining an instance of a SmartKey that describes the primary key for a database column which an Entity EJB object is mapped, as required in claim 1 and similarly in claim 8. These, of course, are features recited by independent claims 1 and 8 (and thus are included in dependent claims 3 and 10) and not found in Apte et al. and Acker et al. Hence, the addition of Acker et al. does not cure the aforementioned deficiencies of Apte et al.

In view of the foregoing differences, it is respectfully submitted that the combination of Apte et al. and Acker et al. does not render obvious claims 3-4 and 10-11.

It is requested the rejection of claims 3-4 and 10-11 under 35 U.S.C. §103 be withdrawn.

In addition, the Examiner alleges that Apte et al. teaches the steps of using reflection to obtain an `ejbFindByPrimaryKey` method and invoking the `ejbFindByPrimaryKey` method with the `SmartKey`, but does not teach the step of loading the EJB Home class using JNDI, as required in claim 3 (and similarly in claim 10). To cure this deficiency in Apte et al., the Examiner turns to Acker et al. However, contrary to the Examiner's assertion, Apte et al. does not even teach or suggest the steps of using reflection and invoking the `ejbFindByPrimaryKey` recited in claim 4 (and similarly in claim 10). In fact, col. 7, lines 31-38 and col. 6, lines 58-67 in Apte et al., cited by the Examiner, merely describes that EJB can be invoked by clients or EJBs residing in one machine can be remotely invoked from another machine. Additionally, Apte et al. clearly states that "one cannot persist EJBs by storing their Home Name and Key Value" (col. 2, lines 36-37). Further, contrary to the Examiner's assertion, Acker et al. does not teach or suggest locating the EJB Home class using JNDI, as required in claim 3. In fact, paragraph [0006] in Acker et al., cited by the Examiner, merely describes that JNDI can be used to find object in the name space. Therefore, the combination of Apte et al. and Acker et al. does not teach or suggest the steps recited in claim 3 (and similarly in claim 10).

Statements appearing above in respect to the disclosures in the cited references represent the present opinions of the applicants' undersigned attorney and, in the event that the Examiner disagrees with any of such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the reference providing the basis for a contrary view.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

* * *

The Commissioner is hereby authorized to deduct any fee or credit any overpayment to Deposit Account No. 50-0624, under Order No. NY-THEOR 201.1 (09907976) from which the undersigned is authorized to draw.

Respectfully submitted,

By 

C. Andrew Im

Registration No.: 40,657

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Attorneys for Applicant